

What is claimed is:

1. A method for producing a long glass fiber-reinforced thermoplastic resin composition, the method comprising the steps of:

selecting a quantity of long glass fiber;

5 adding the selected quantity of long glass fiber to a first styrenic copolymer to form a master-batch, said first styrenic copolymer being a high flow copolymer; and

blending the master-batch with a styrenic second copolymer.

2. The method in accordance with Claim 1 wherein said first styrenic copolymer is selected from the group consisting of styrene-acrylonitrile (SAN),

10 acrylonitrile-butadiene-styrene (ABS), and an alloy of ABS resins.

3. The method in accordance with Claim 1 wherein the second copolymer is a stiffer flowing material selected from the group consisting of acrylonitrile-butadiene-styrene (ABS), styrene-maleic anhydride (SMA), acrylate styrene acrylonitrile (ASA), PC/ASA, PC/ABS, and PC/SMA.

15 4. The method in accordance with Claim 1 wherein the second copolymer is a stiffer flowing material and blends with the first copolymer to form a homogeneous blend.

5. The method in accordance with Claim 1 wherein the second copolymer is a stiffer flowing amorphous styrenic copolymer.

20 6. The method in accordance with Claim 1 wherein the selected quantity of glass fibers is added to a high flow of the first copolymer.

7. The method in accordance with Claim 1 wherein the selected quantity of glass fibers is added to the first copolymer in such an amount so that the resulting master-batch has a glass fiber concentration of between about 40 percent and about 75 percent.

8. The method in accordance with Claim 1 wherein the blending ratio of the master-batch with the second copolymer is between about 10 percent and about 40 percent.

9. The method in accordance with Claim 1 wherein the long glass fiber is glass roving.

5 10. The method in accordance with Claim 1 wherein the master-batch is dry-blended with the second copolymer.

11. The method in accordance with Claim 1 wherein the second copolymer is a neat mass acrylonitrile-butadiene-styrene (ABS) resin.

12. A method for producing a long glass fiber-reinforced thermoplastic resin
10 composition, the method comprising the steps of:

 selecting a quantity of long glass fiber;

 adding the selected quantity of long glass fiber to a first copolymer to form a master-batch, the first copolymer being selected from the group consisting of styrene-acrylonitrile (SAN), acrylonitrile-butadiene-styrene (ABS), an alloy of ABS resins, and polycarbonate;

15 and

 dry blending the master-batch with a second copolymer selected from the group consisting of acrylonitrile-butadiene-styrene (ABS), styrene-maleic anhydride (SMA), acrylate styrene acrylonitrile (ASA), PC/ASA, PC/ABS, and PC/SMA.

13. The method in accordance with Claim 12 wherein the first copolymer is a
20 high flow copolymer.

14. The method in accordance with Claim 12 wherein the second copolymer is a stiffer flowing material and blends with the first copolymer to form a homogeneous blend.

15. The method in accordance with Claim 12 wherein the selected quantity of glass fibers is added to a high flow of the first copolymer.

16. The method in accordance with Claim 12 wherein the selected quantity of glass fibers is added to the first copolymer in such an amount so that the resulting master-
5 batch has a glass fiber concentration of between about 40 percent and about 75 percent.

17. The method in accordance with Claim 12 wherein the blending ratio of the master-batch with the second copolymer is between about 10 percent and about 40 percent.

18. The method in accordance with Claim 12 wherein the long glass fiber is
10 glass roving.

19. A glass fiber-reinforced article manufactured by the process comprising:
adding a quantity of long glass fiber to a first copolymer to form a master-batch, the first copolymer being a high flow copolymer selected from the group consisting of styrene-acrylonitrile (SAN), acrylonitrile-butadiene-styrene (ABS), an alloy of ABS resins, and
15 polycarbonate;

blending the master-batch with a second copolymer selected from the group consisting of acrylonitrile-butadiene-styrene (ABS), styrene-maleic anhydride (SMA), acrylate styrene acrylonitrile (ASA), PC/ASA, PC/ABS, and PC/SMA to form an injectable composition; and

20 injecting the composition into a mold.

20. A glass fiber-reinforced thermoplastic resin composition comprising:
glass fiber,
a first styrenic copolymer, said first styrenic copolymer being a high flow copolymer
5 selected from the group consisting of styrene-acrylonitrile (SAN), acrylonitrile-butadiene-
styrene (ABS), an alloy of ABS resins and a polycarbonate; and
a second styrenic copolymer.

21. The glass fiber-reinforced thermoplastic resin composition of Claim 20
wherein said second styrenic copolymer is selected from the group consisting of
10 acrylonitrile-butadiene-styrene (ABS), styrene-maleic anhydride (SMA), arylate styrene
acrylonitrile (ASA), PC/ASA, PC/ABS, and PC/SMA.

22. The glass fiber-reinforced thermoplastic resin composition of Claim 21
wherein said glass fiber is glass roving.

23. The glass fiber-reinforced thermoplastic resin composition of Claim 20
15 wherein said second styrenic copolymer is a neat mass acrylonitrile-butadiene-styrene
(ABS) resin.